SolarSpec™ DC Connectors from Molex with quick, easy 'snap-lock' mating and internal locking mechanism for superior safety provide a rugged, durable, IP-67 sealed connection for series cabling of PV solar panels and deliver value to module manufacturers, installers and distributors

PRELIMINARY
SolarSpec™ DC Connectors for PV Panels

Pin and Socket DC Connectors
Pin Contacts
Socket Contacts

To complement the existing SolarSpec™ Junction Box for Silicon PV panels, Molex has developed pin and socket industry standard DC Connectors. The in-house design and manufacture of SolarSpec DC connectors will enable Molex to deliver a superior-quality, reliable, lower-cost solution to customers.

In addition, customers will benefit from exclusive Molex design features such as molded ribs for a secure grip and the lowest contact resistance on the market, providing greatest efficiency over competitive connector versions.

Molex can also supply an unlock tool to release the internal safety locking mechanism together with a powerful, lightweight, 'one-hand' ratchet design crimp tool for easy termination. For additional information on Molex's SolarSpec products visit: www.molex.com/link/solarjunctionbox.html.

Pin (top) and Socket (bottom) SolarSpec™ DC Connectors

Mated SolarSpec™ DC Connectors

FEATURES AND BENEFITS

- Reliable, robust industry standard pin and socket DC connectors for series cabling of silicon photovoltaic (PV) panels
- Simple 'snap-lock' mating for quick and easy factory or field assembly
- Polarisation and an audible 'click' ensure successful mating of the connectors
- Internal locking mechanism protected by latch guards prevents accidental and unauthorised decoupling of connectors; ensures reliable connection and safe handling
- "Touch-proof" safety design provides protection from electrical current even when connectors are unmated
- IP67 sealing protection against dust and water
- Resistant to UV and ozone damage
- Dual-qualification by TÜV and UL; guarantees long-life in harsh environments
- Exclusive moulded surface ribs allow for secure gripping, especially with work gloves
- Contact resistance <0.5mΩ; lowest contact resistance compared with competitor products for greatest efficiency
- Strain relief ensures strong, secure, enduring cable connections
- Meets NEC 2008 and NFPA 70; US-code compliant for "The safe installation of electrical wiring and equipment"
- Accommodates 14, and 12 to 10 AWG cable

MARKETS AND APPLICATIONS

- A junction box is assembled on to each PV panel during the panel manufacturing process
- DC connectors, terminated to cables, are used to link the junction boxes and PV panels in a serial grid array *(parallel arrangements are also possible)*
- Applications for solar silicon photovoltaic (PV) panels include:
  - Stadiums
  - Home installations
  - Public buildings
  - Solar farms *(power plants)*

Home installations

Solar farms (power plants)

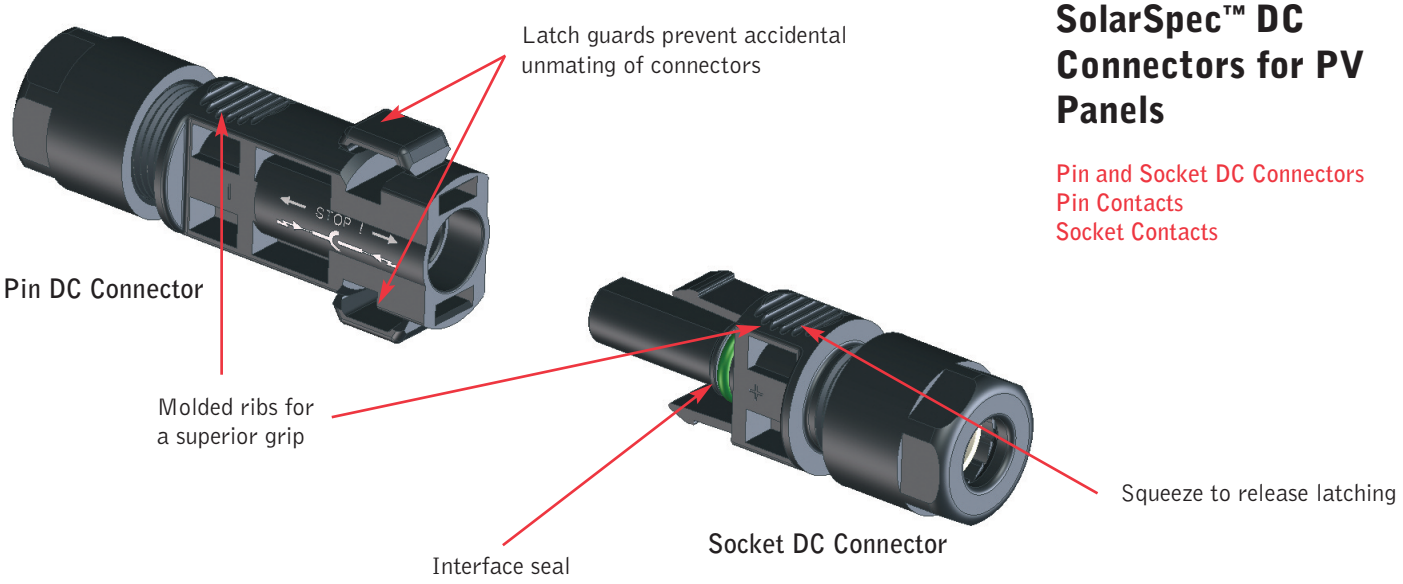
Public buildings

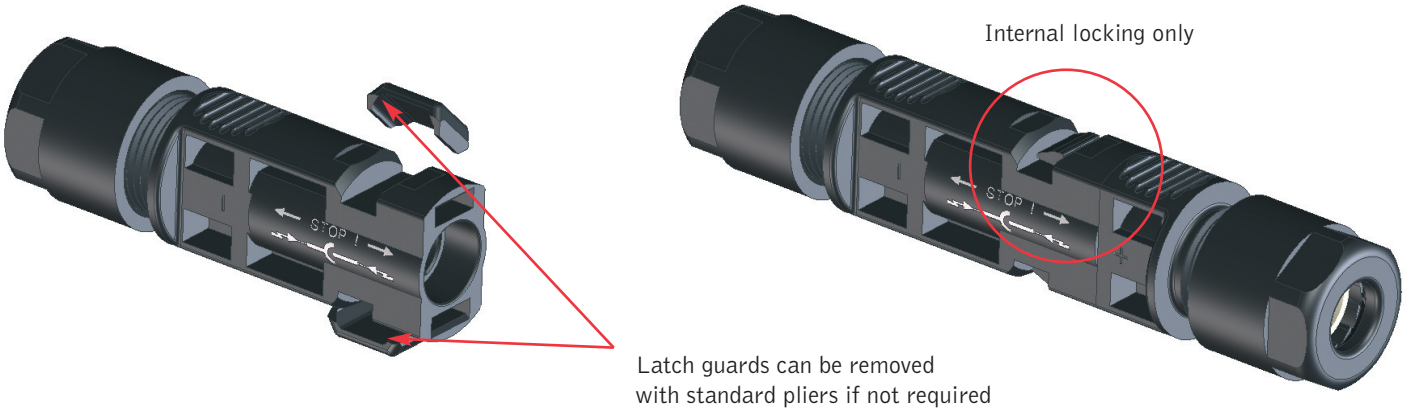
ADDITIONAL PRODUCT FEATURES

PRELIMINARY

SolarSpec™ DC Connectors for PV Panels

Pin and Socket DC Connectors
Pin Contacts
Socket Contacts





Molex SolarSpec™ Junction Box
Assembly shown with DC connectors and cable assemblies

Note: Unless otherwise noted, Molex reserves the right to delay or cancel production of the depicted product without additional notice. Please contact your Molex Customer Service representative for product availability.

Order No. 987650-4863 Printed in EUR/GF/2010.08

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